

# Section 1

## Crashes 2002

<b>Utah Crashes 1972 – 2002.....</b>	<b>1.2</b>
<b>Injury and Fatal Crash Trends 1972 – 2002.....</b>	<b>1.4</b>
<b>Crash Severity.....</b>	<b>1.5</b>
<b>Crashes by County .....</b>	<b>1.6</b>
<b>Crashes by City.....</b>	<b>1.9</b>
<b>Crash Times .....</b>	<b>1.10</b>
<b>Holiday Crashes 2000 - 2002 .....</b>	<b>1.13</b>
<b>Crash Characteristics.....</b>	<b>1.14</b>
<b>Crash Violations and Contributing Factors.....</b>	<b>1.16</b>
<b>Drivers Involved in Crashes .....</b>	<b>1.18</b>
<b>Out of State Drivers Involved in Utah Crashes .....</b>	<b>1.20</b>

### TABLES

Table 1.01 Crashes, Utah 1972-2002
Table 1.02 Crashes by County, Utah 2002
Table 1.03 Crash Rates of Cities with More than 200 Crashes, Utah 2002
Table 1.04 Hour of Crashes, Utah 2002
Table 1.05 Month of Crashes, Utah 2002
Table 1.06 Day of Week for Crashes, Utah 2002
Table 1.07 Fatal Crashes by Holiday, Utah 2000 - 2002
Table 1.08 Types of Crashes, Utah 2002
Table 1.09 Urban/Rural Location of Crashes, Utah 2002
Table 1.10 Collision Description of Crashes, Utah 2002
Table 1.11 Type of Vehicles Involved in Crashes, Utah 2002
Table 1.12 Violations for Crashes, Utah 2002
Table 1.13 Contributing Factors of Crashes, Utah 2002
Table 1.14 Age of Drivers Involved in Crashes, Utah 2002
Table 1.15 Gender of Drivers Involved in Crashes, Utah 2002
Table 1.16 State of Licensure for Drivers Involved in Crashes, Utah 2002
Table 1.17 State of Licensure for Drivers by County, Utah 2002

### FIGURES

Figure 1.01 Injury Crash Rates per Miles Traveled, Utah 1972 –2002
Figure 1.02 Fatal Crash Rates per Miles Traveled, Utah 1972 –2002
Figure 1.03 Severity of Crashes as Reported by Police, Utah 2002
Figure 1.04 Injury Crashes by County, Utah 2002
Figure 1.05 Fatal Crashes by County, Utah 2002
Figure 1.06 Hour of Injury Crashes and Fatal Crashes, Utah 2002
Figure 1.07 Day of Week for Crashes, Utah 2002
Figure 1.08 Age of Drivers Involved in Crashes, Utah 2002
Figure 1.09 Age of Driver by Crash Rate per Licensed Driver, Utah 2002

# Utah Crashes 1972 - 2002

From 1972 to 2002, over 1.3 million motor vehicle crashes occurred in Utah. Approximately 426,000 of the crashes involved injuries and 8,040 involved fatalities. During this 30-year time span, the total crash rates, injury crash rates, and fatal crash rates have all decreased significantly (Table 1.01).

In 2002, the total crash rate per 100 million vehicle miles traveled in Utah was 218; a 3% decrease from the 2001 rate. The injury crash rate decreased by 3% from the 2001 rate, while the fatal crash rate for 2002 remained the same as 2001.

Several factors may account for these changes. One may be the changes in the crash reporting criteria. Most notably, 1997 was the first year crashes occurring on private property were excluded. This change in the reporting system could account for the decrease in total crashes and injury crashes from the previous years. It would not impact the reporting of fatal crashes because all fatal crashes are reported regardless of whether they occur on private property or not. Another factor may be improvements in the medical system. As more lives are saved, the number of fatalities may be reduced, but the number of injuries reported may increase. Other factors that impact the decrease in the number of crashes, as well as the severity of crash injuries include: increased seatbelt use; improvements in the design of the roadways and vehicles; legislation including lower speed limits, impaired driving laws, and graduated driver licensing laws.

It is important to note that when doing comparisons between years, rates should be used rather than the crude number of events. Rates provide a more accurate picture of trends over time. The rates used in this report are based on the annual vehicle miles traveled. The Utah Department of Transportation supplies the number of vehicle miles traveled each year.

Note: All data in section 1 are based on crashes, not person statistics. Person data are reported in section 2.

Table 1.01 Crashes, Utah 1972-2002

Year	Non-Injury Crashes		Injury Crashes		Fatal Crashes		Total Crashes	
	Crashes	Rate per 100 MVMT	Crashes	Rate per 100 MVMT	Crashes	Rate per 100 MVMT	Crashes	Rate per 100 MVMT
1972	27,914	400.5	11,630	166.9	312	4.5	39,856	571.9
1973	26,220	360.5	11,710	161.0	304	4.2	38,234	525.6
1974	20,637	276.7	10,560	141.6	204	2.7	31,401	421.1
1975	24,740	311.5	11,441	144.1	245	3.1	36,426	458.7
1976	22,435	266.4	11,685	138.8	225	2.7	34,345	407.9
1977	25,562	282.3	12,652	139.7	310	3.4	38,524	425.5
1978	28,946	294.6	13,423	136.6	315	3.2	42,684	434.4
1979	26,732	272.5	13,449	137.1	287	2.9	40,468	412.5
1980	21,589	202.8	11,701	109.9	292	2.7	33,582	315.5
1981	23,844	222.2	11,824	110.2	321	3.0	35,989	335.3
1982	26,425	241.4	11,504	105.1	263	2.4	38,192	348.9
1983	28,419	253.1	12,317	109.7	253	2.3	40,989	365.1
1984	33,738	289.8	13,477	115.8	274	2.4	47,489	407.9
1985	33,684	279.9	13,917	115.6	270	2.2	47,871	397.8
1986	32,426	264.6	13,988	114.2	276	2.3	46,690	381.0
1987	33,386	263.3	13,599	107.3	271	2.1	47,256	372.7
1988	35,614	268.5	13,377	100.9	258	1.9	49,249	371.3
1989	37,110	266.7	13,941	100.2	269	1.9	51,320	368.8
1990	37,823	258.2	14,632	99.9	236	1.6	52,691	359.8
1991	33,443	217.3	13,763	89.4	229	1.5	47,435	308.2
1992	34,760	213.7	15,665	96.3	235	1.4	50,660	311.5
1993	38,357	224.9	17,088	100.2	259	1.5	55,704	326.6
1994	40,243	222.6	18,726	103.6	303	1.7	59,272	327.8
1995	37,532	199.8	19,828	105.5	284	1.5	57,644	306.8
1996	40,225	207.0	20,988	108.0	292	1.5	61,505	316.5
1997	33,512	164.2	21,131	103.5	309	1.5	54,952	269.3
1998	34,337	161.7	19,427	91.5	308	1.5	54,072	254.6
1999	32,971	150.8	19,513	89.2	318	1.5	52,802	241.5
2000	33,269	147.8	19,564	86.9	318	1.4	53,151	236.0
2001	33,113	141.5	19,332	82.6	259	1.1	52,704	225.2
2002	33,542	137.2	19,552	80.0	276	1.1	53,370	218.4
Total	972,548	221.2	426,520	97.0	8,040	1.8	1,340,453	304.9

\*MVMT—million vehicle miles traveled

# Injury and Fatal Crashes Trends 1972 - 2002

Figure 1.01 reflects the decreasing trend in injury crash rates per 100 million vehicle miles traveled (MVMT) from 1972 to 2002. The injury crash rates were highest in the early 1970s. A large decrease occurred in 1980, followed by a slight increase between 1990 to 1997.

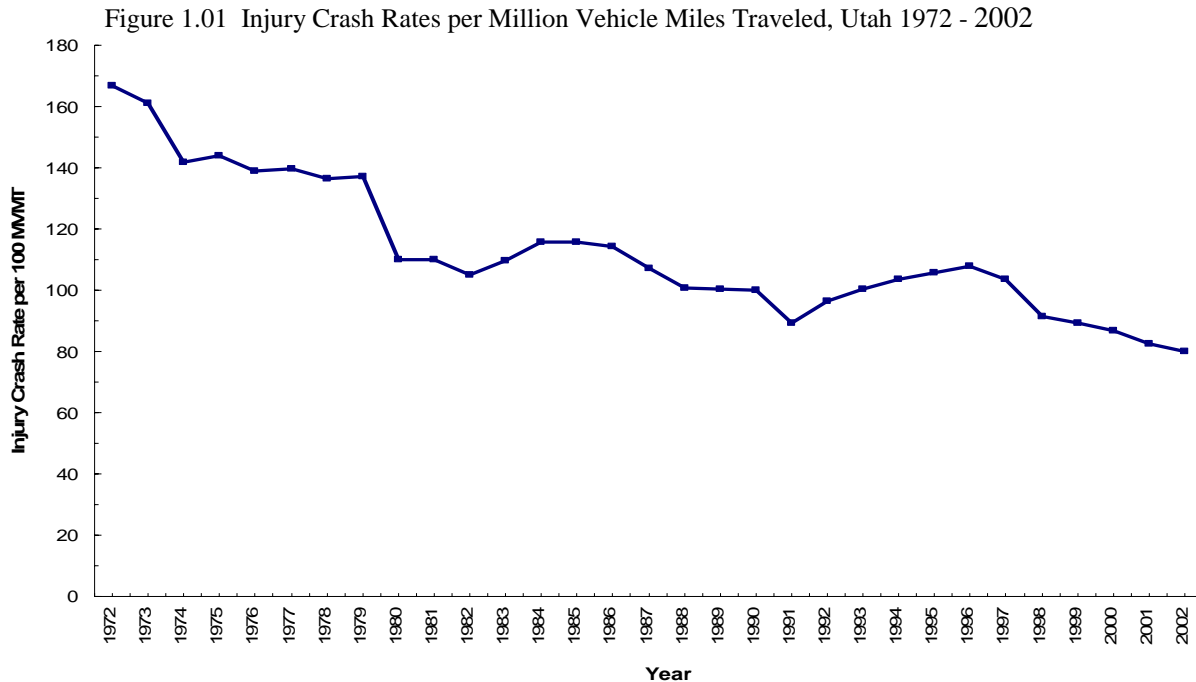
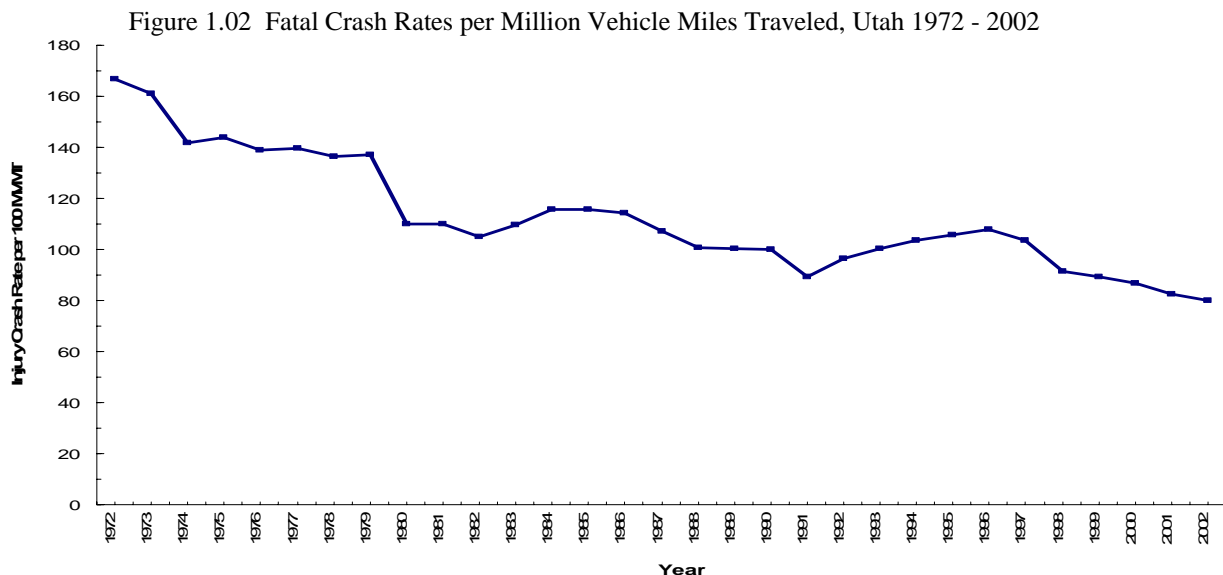


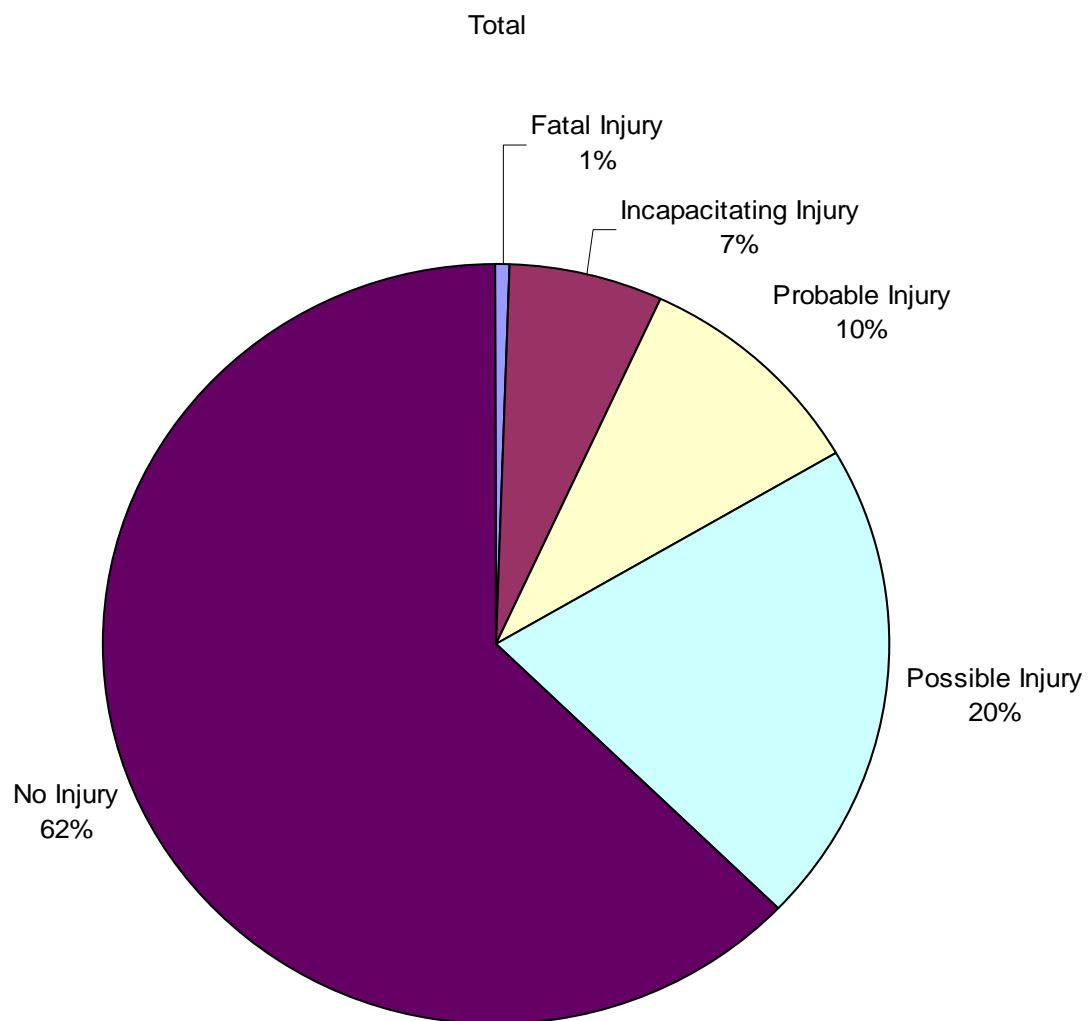
Figure 1.02 reflects the decreasing trend in fatal crash rates per 100 million vehicle miles traveled (MVMT) from 1972 to 2002. The fatal crash rates have markedly decreased from 1972 (4.5 per 100 MVMT) to 2002 (1.1 per 100 MVMT). The biggest decrease in fatal crash rates occurred in 1973, the same year the speed limit was lowered to 55 MPH.



# Crash Severity

Figure 1.03 shows the breakdown of crash severity as recorded by the police. The majority (62.8%) of crashes resulted in property damage only, 37.2% of crashes resulted in some level of injury, and fatal crashes represented less than 1% (0.5%) of crashes in Utah.

Figure 1.03 Severity of Crashes as Reported by Police, Utah 2002 (n=53,370)



# Crashes by County

Figure 1.04 depicts the number of injury crashes for each county in Utah. Salt Lake, Utah, and Weber had the highest injury crashes. For more information on total crashes, injury crashes and fatal crashes by county see Table 1.02.

Figure 1.04 Injury Crashes by County, Utah 2002

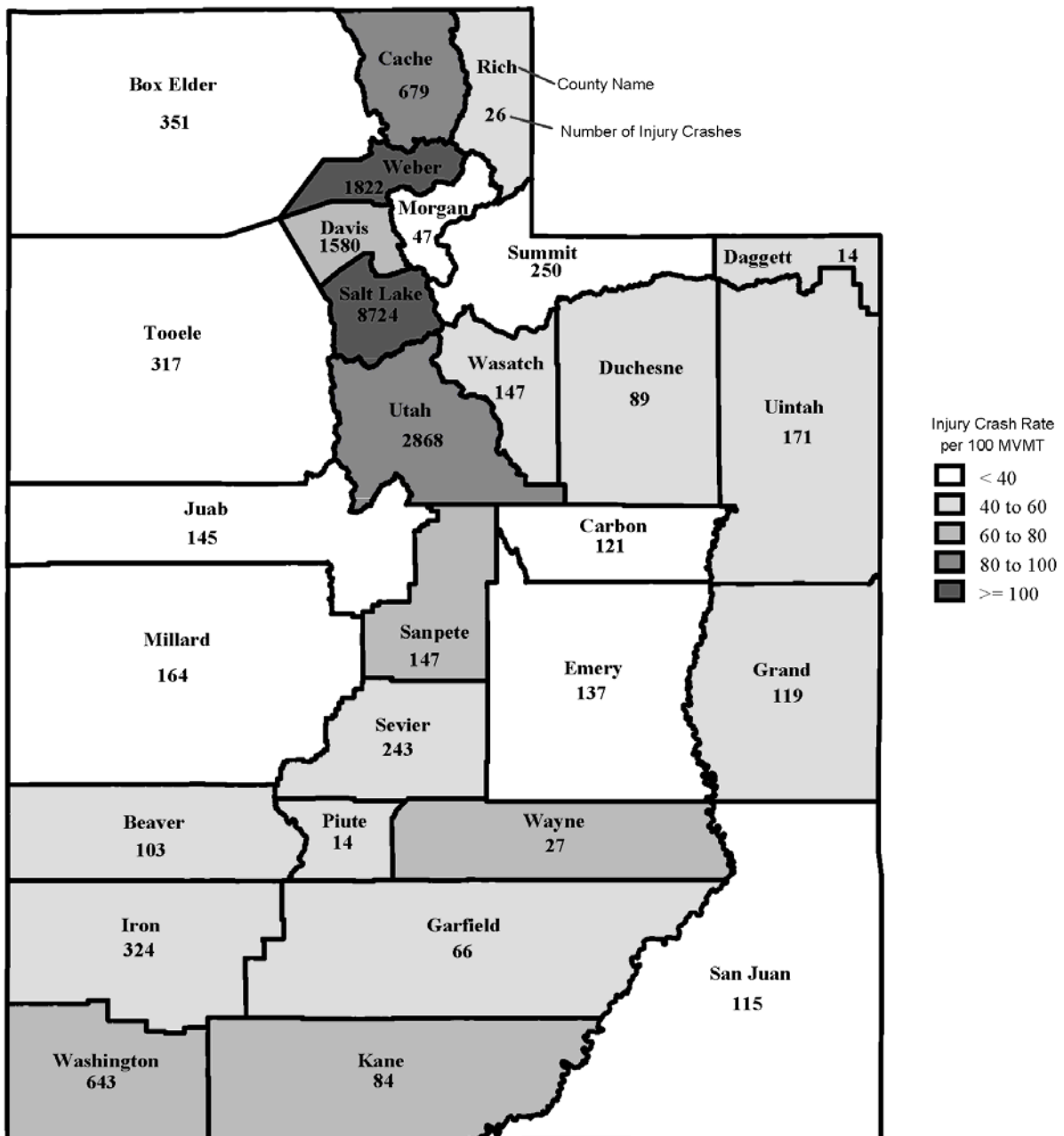


Figure 1.05 depicts the number of fatal crashes for each county in Utah. Salt Lake, Utah and Weber had the highest number of fatal crashes. For more information on total crashes, injury crashes and fatal crashes by county see Table 1.02.

Figure 1.05 Fatal Crashes by County, Utah 2002

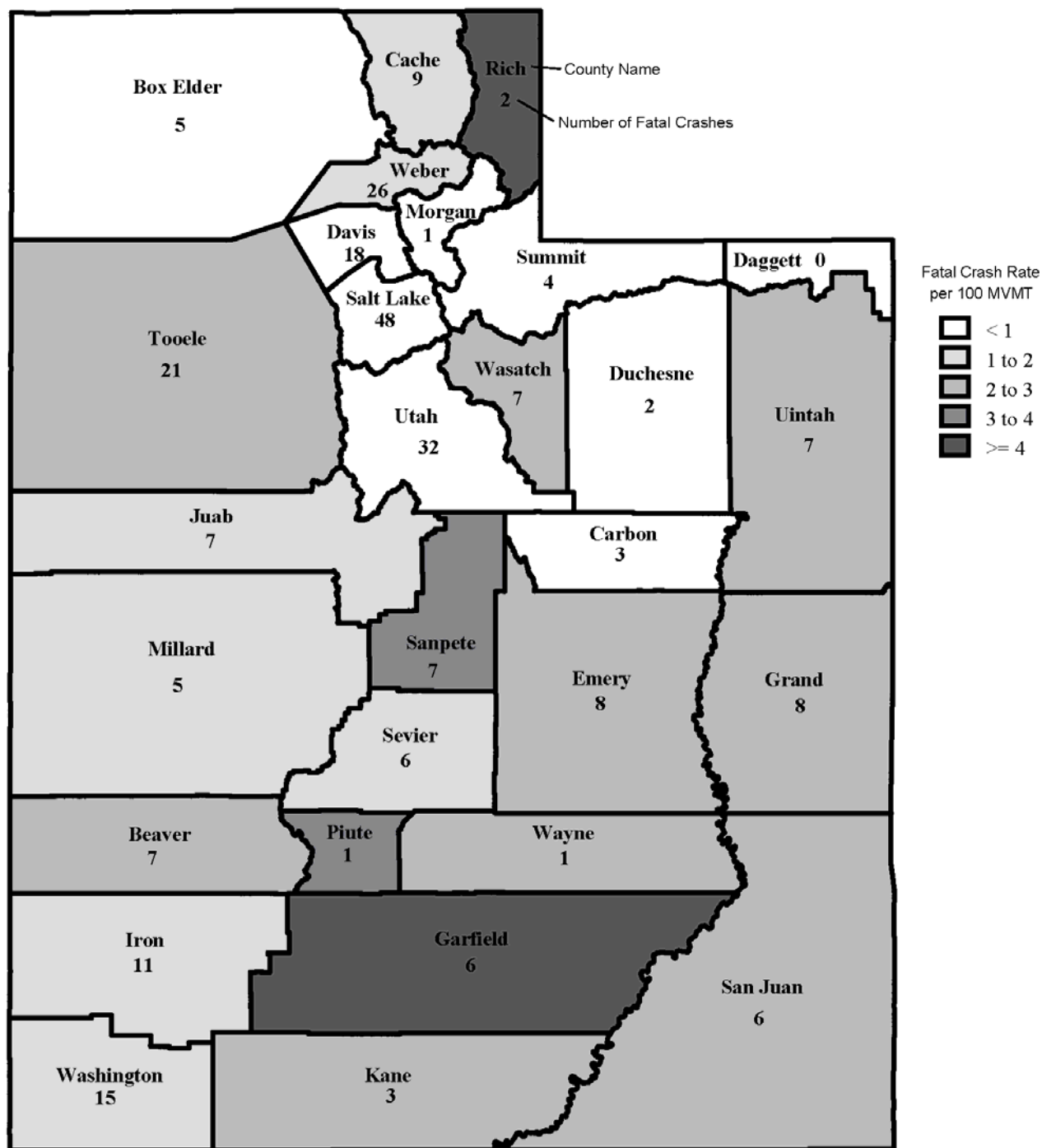


Table 1.02 shows the rates of total crashes, injury crashes and fatal crashes for each county. Two different rates are given in Table 1.02; one based on the miles traveled in the county and another on the population of the county. The rate of crashes per miles traveled provides a more accurate reflection of the motor vehicle crash risk. Cases where the crash rate per population is higher than the rate per miles traveled may indicate that the county has a large number of non-county drivers.

Table 1.02 Crashes by County, Utah 2002

County	Non-Injury Crashes			Injury Crashes			Fatal Crashes			Total Crashes		
	Rate per		Population	Rate per		Population	Rate per		Population	Rate per		Population
	Crashes	MVMT		Crashes	MVMT		Crashes	MVMT		Crashes	MVMT	
Beaver	207	85.6	332.1	103	42.6	165.2	7	2.9	11.2	317	131.1	508.5
Box Elder	600	61.8	137.4	351	36.2	80.4	5	0.5	1.1	956	98.5	218.8
Cache	1,527	184.3	160.0	679	81.9	71.2	9	1.1	0.9	2,215	267.3	232.1
Carbon	316	90.9	157.3	121	34.8	60.2	3	0.9	1.5	440	126.6	219.0
Daggett	29	105.5	304.6	14	50.9	147.1	0	0.0	0.0	43	156.5	451.7
Davis	2,912	126.4	116.5	1,580	68.6	63.2	18	0.8	0.7	4,510	195.8	180.4
Duchesne	210	103.7	142.0	89	44.0	60.2	2	1.0	1.4	301	148.6	203.5
Emery	212	57.0	200.9	137	36.8	129.9	8	2.1	7.6	357	95.9	338.4
Garfield	105	76.3	224.7	66	48.0	141.3	6	4.4	12.8	177	128.6	378.9
Grand	182	62.5	214.4	119	40.9	140.2	8	2.7	9.4	309	106.1	364.0
Iron	585	93.5	169.2	324	51.8	93.7	11	1.8	3.2	920	147.0	266.1
Juab	205	51.9	232.3	145	36.7	164.3	7	1.8	7.9	357	90.3	404.5
Kane	147	112.1	236.0	84	64.0	134.8	3	2.3	4.8	234	178.4	375.6
Millard	297	67.4	232.7	164	37.2	128.5	5	1.1	3.9	466	105.7	365.1
Morgan	115	90.4	159.6	47	36.9	65.2	1	0.8	1.4	163	128.1	226.2
Piute	37	112.9	263.2	14	42.7	99.6	1	3.1	7.1	52	158.7	369.8
Rich	46	105.6	232.4	26	59.7	131.4	2	4.6	10.1	74	169.9	373.9
Salt Lake	14,060	176.2	152.2	8,724	109.3	94.4	48	0.6	0.5	22,832	286.2	247.1
San Juan	201	68.1	140.8	115	39.0	80.6	6	2.0	4.2	322	109.2	225.6
Sanpete	219	95.5	93.0	147	64.1	62.4	7	3.1	3.0	373	162.6	158.4
Sevier	379	92.2	197.9	243	59.1	126.9	6	1.5	3.1	628	152.8	328.0
Summit	690	101.4	215.7	250	36.7	78.2	4	0.6	1.3	944	138.8	295.1
Tooele	545	67.1	119.5	317	39.0	69.5	21	2.6	4.6	883	108.7	193.6
Uintah	322	110.6	122.2	171	58.8	64.9	7	2.4	2.7	500	171.8	189.7
Utah	4,564	136.2	116.7	2,868	85.6	73.3	32	1.0	0.8	7,464	222.7	190.8
Wasatch	426	160.8	256.6	147	55.5	88.5	7	2.6	4.2	580	218.9	349.3
Washington	1,204	124.1	121.9	643	66.3	65.1	15	1.5	1.5	1,862	191.9	188.5
Wayne	59	138.9	228.2	27	63.6	104.4	1	2.4	3.9	87	204.8	336.6
Weber	3,101	194.7	155.2	1,822	114.4	91.2	26	1.6	1.3	4,949	310.7	247.7
Statewide	33,542	137.2	144.5	19,552	80.0	84.2	276	1.1	1.2	53,370	218.4	229.9



# Crashes by City

The crash rates per population for cities with over 200 crashes in 2002 are shown in Table 1.03. While Riverdale had the highest rate per population of total crashes and injury crashes, Draper had the highest rate per population of fatal crashes.

Table 1.03 Crash Rates of Cities with More than 200 Crashes, Utah 2002

City	Non-Injury Crashes Rate per 10,000		Injury Crashes Rate per 10,000		Fatal Crashes Rate per 10,000		Total Crashes Rate per 10,000	
	Crashes	Population	Crashes	Population	Crashes	Population	Crashes	Population
Salt Lake City	1,858	106.5	2,172	124.5	17	1.0	4,047	232.0
Sandy	1,657	156.5	899	84.9	5	0.5	2,561	241.9
West Valley	1,218	113.4	971	90.4	2	0.2	2,191	203.9
Provo	1,383	121.7	795	69.9	1	0.1	2,179	191.7
Ogden City	1,248	182.8	832	121.9	15	2.2	2,095	306.9
Murray	1,131	320.7	586	166.2	1	0.3	1,718	487.1
West Jordan	983	141.8	495	71.4	0	0.0	1,478	213.2
Orem	707	84.3	609	72.6	5	0.6	1,321	157.5
Layton	769	137.1	452	80.6	4	0.7	1,225	218.5
St. George	804	160.3	372	74.2	0	0.0	1,176	234.5
Logan	812	195.2	279	67.1	2	0.5	1,093	262.8
South Salt Lake	585	323.3	304	168.0	3	1.7	892	492.9
Draper	549	255.3	256	119.0	5	2.3	810	376.7
Midvale	476	179.3	203	76.4	0	0.0	679	255.7
Clearfield	406	146.3	201	72.4	1	0.4	608	219.1
Bountiful	394	92.6	196	46.1	1	0.2	591	138.9
Taylorsville	329	60.5	222	40.9	0	0.0	551	101.4
Riverdale City	350	483.4	184	254.1	0	0.0	534	737.6
Roy City	308	93.3	150	45.5	0	0.0	458	138.8
American Fork	282	119.6	162	68.7	2	0.8	446	189.1
Cedar	321	141.9	117	51.7	3	1.3	441	194.9
South Ogden City	249	162.0	166	108.0	2	1.3	417	271.3
Lehi	230	119.6	149	77.5	2	1.0	381	198.1
Pleasant Grove	240	103.6	132	57.0	1	0.4	373	161.0
South Jordan	250	71.0	119	33.8	0	0.0	369	104.7
Tooele	235	105.2	79	35.4	2	0.9	316	141.4
Springville	196	104.5	114	60.8	0	0.0	310	165.2
Spanish Fork	191	96.5	114	57.6	1	0.5	306	154.6
Kaysville	192	106.5	101	56.0	2	1.1	295	163.6
North Salt Lake	196	219.9	80	89.7	0	0.0	276	309.6
Lindon	184	232.8	81	102.5	1	1.3	266	336.6
Park City	209	291.1	55	76.6	0	0.0	264	367.7
Centerville	162	95.1	78	45.8	2	1.2	242	142.0
Riverton	146	45.7	85	26.6	0	0.0	231	72.3
North Logan	141	223.1	75	118.7	1	1.6	217	343.3
Farmington	139	105.2	74	56.0	2	1.5	215	162.7

# Crash Times

Table 1.04 shows that total crashes and injury crashes were more likely to occur between 2 p.m. and 6 p.m., with a peak at 5 p.m. (evening rush hour). Fatal crashes followed a similar pattern with a peak at 5 p.m. and another peak at 7 a.m. (Figure 1.05).

Table 1.04 Hour of Crashes, Utah 2002

Hour	Non-Injury Crashes		Injury Crashes		Fatal Crashes		Total Crashes	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Midnight	459	1.4%	295	1.5%	9	3.3%	763	1.4%
1 a.m.	409	1.2%	233	1.2%	11	4.0%	653	1.2%
2 a.m.	304	0.9%	204	1.0%	3	1.1%	511	1.0%
3 a.m.	240	0.7%	146	0.7%	4	1.4%	390	0.7%
4 a.m.	204	0.6%	132	0.7%	6	2.2%	342	0.6%
5 a.m.	407	1.2%	206	1.1%	13	4.7%	626	1.2%
6 a.m.	788	2.3%	382	2.0%	8	2.9%	1,178	2.2%
7 a.m.	1,638	4.9%	896	4.6%	23	8.3%	2,557	4.8%
8 a.m.	1,642	4.9%	827	4.2%	11	4.0%	2,480	4.6%
9 a.m.	1,350	4.0%	765	3.9%	4	1.4%	2,119	4.0%
10 a.m.	1,334	4.0%	754	3.9%	4	1.4%	2,092	3.9%
11 a.m.	1,783	5.3%	982	5.0%	17	6.2%	2,782	5.2%
Noon	2,060	6.1%	1,207	6.2%	11	4.0%	3,278	6.1%
1 p.m.	2,027	6.0%	1,252	6.4%	15	5.4%	3,294	6.2%
2 p.m.	2,330	6.9%	1,318	6.7%	18	6.5%	3,666	6.9%
3 p.m.	2,772	8.3%	1,597	8.2%	10	3.6%	4,379	8.2%
4 p.m.	2,706	8.1%	1,764	9.0%	24	8.7%	4,494	8.4%
5 p.m.	3,209	9.6%	1,901	9.7%	13	4.7%	5,123	9.6%
6 p.m.	2,293	6.8%	1,425	7.3%	9	3.3%	3,727	7.0%
7 p.m.	1,533	4.6%	982	5.0%	18	6.5%	2,533	4.7%
8 p.m.	1,245	3.7%	714	3.7%	12	4.3%	1,971	3.7%
9 p.m.	1,233	3.7%	623	3.2%	10	3.6%	1,866	3.5%
10 p.m.	899	2.7%	545	2.8%	9	3.3%	1,453	2.7%
11 p.m.	677	2.0%	402	2.1%	14	5.1%	1,093	2.0%
Total	33,542	100.0%	19,552	100.0%	276	100.0%	53,370	100.0%

Figure 1.06 Hours of Injury Crashes and Fatal Crashes, Utah 2002 (see Table 1.04 for values)

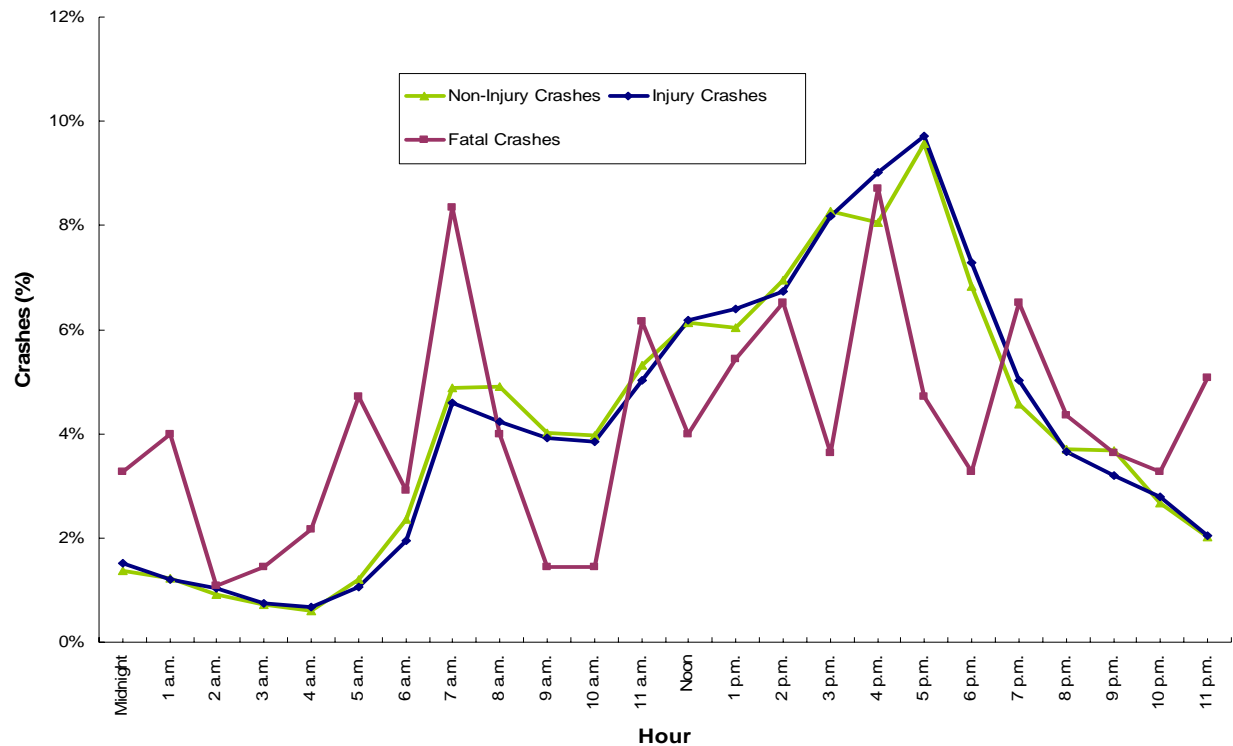


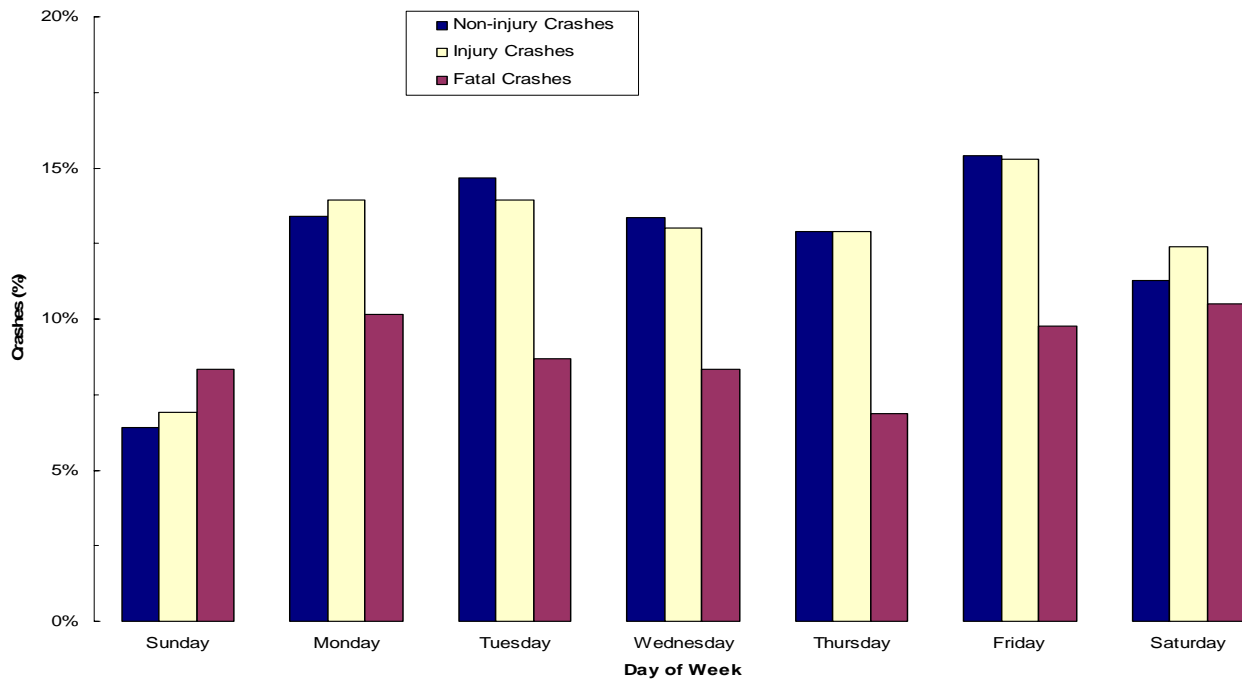
Table 1.05 shows that January had the highest rate of total crashes per day, while the months July, August, and September had the highest rates of fatal crashes per day. In fact, 35% of all fatal crashes occurred between the months of July and September.

Table 1.05 Months of Crashes, Utah 2002

Month	Non-Injury Crashes		Injury Crashes		Fatal Crashes		Total Crashes	
	Number	Rate per day	Number	Rate per day	Number	Rate per day	Number	Rate per day
January	3,445	111.1	1,583	51.1	19	0.6	5,047	162.8
February	2,339	83.5	1,317	47.0	13	0.5	3,669	131.0
March	2,771	89.4	1,449	46.7	16	0.5	4,236	136.6
April	2,536	84.5	1,579	52.6	21	0.7	4,136	137.9
May	2,580	83.2	1,626	52.5	23	0.7	4,229	136.4
June	2,422	80.7	1,564	52.1	18	0.6	4,004	133.5
July	2,963	95.6	1,950	62.9	35	1.1	4,948	159.6
August	2,892	93.3	1,911	61.6	30	1.0	4,833	155.9
September	2,711	90.4	1,731	57.7	31	1.0	4,473	149.1
October	3,021	97.5	1,737	56.0	29	0.9	4,787	154.4
November	2,734	91.1	1,471	49.0	25	0.8	4,230	141.0
December	3,128	100.9	1,634	52.7	16	0.5	4,778	154.1
Total	33,542	91.9	19,552	53.6	276	0.8	53,370	146.2

Figure 1.06 and Table 1.06 show that the highest percentage of total crashes and injury crashes occurred on Friday. However, crashes occurring on Sunday were 1.3 times more likely to involve a fatality compared to crashes that occurred on other days of the week. The majority of Sunday fatal crashes occurred during the early morning hours.

Figure 1.07 Day of Week for Crashes, Utah 2002



Note: The above graph is based on percentages for the different crash categories. To read the above graph, look at one category across the days of the week. For example, look at only the white bars (i.e. injury crashes) from day to day. Do not compare the heights of the different crash categories for a specific day.

Table 1.06 Day of Week for Crashes, Utah 2002

Day of Week	Non-injury Crashes		Injury Crashes		Fatal Crashes		Total Crashes	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Sunday	2,150	6.4%	1,353	6.9%	23	8.3%	3,526	6.6%
Monday	4,498	13.4%	2,728	14.0%	28	10.1%	7,254	13.6%
Tuesday	4,918	14.7%	2,728	14.0%	24	8.7%	7,670	14.4%
Wednesday	4,486	13.4%	2,543	13.0%	23	8.3%	7,052	13.2%
Thursday	4,331	12.9%	2,521	12.9%	19	6.9%	6,871	12.9%
Friday	5,162	15.4%	2,992	15.3%	27	9.8%	8,181	15.3%
Saturday	3,786	11.3%	2,426	12.4%	29	10.5%	6,241	11.7%
Missing	4,211	12.6%	2,261	11.6%	103	37.3%	6,575	12.3%
Total	33,542	100.0%	19,552	100.0%	276	100.0%	53,370	100.0%

# Holiday Crashes 2000 - 2002

Table 1.07 shows the number of fatal crashes that occurred on holidays for the past three years. The number of days included in a holiday varied by year. When a holiday falls on Monday, the holiday begins at noon the Friday before the holiday, and ends at midnight on the holiday. If a holiday does not fall on the weekend, the holiday begins at noon the day before the holiday, and ends on midnight the day after the holiday. Because of the differing lengths of holidays, the rate per day is provided and should be used to compare holidays by year. Holidays are a concern due to increased motor vehicle travel combined with other possible risk factors (e.g., alcohol and other drug impaired driving, fatigued driving). July 24th was the holiday with the highest rate of fatal crashes for the years 2000 and 2001 and July 4th had the highest rate of fatal crashes in 2002. The fatal crash rate per day for holidays is 0.9 which is higher than the rate per day of 0.7 for the whole year.

Table 1.07 Fatal Crashes by Holiday, Utah 2000 - 2002

Holiday	2000 Fatal Crashes		2001 Fatal Crashes		2002 Fatal Crashes	
	Number	Rate per Day	Number	Rate per Day	Number	Rate per Day
New Years	0	0.0	4	1.0	1	0.3
Memorial Day	2	0.5	5	1.3	5	1.3
July 4th	4	1.0	2	0.7	9	1.8
July 24th	5	1.3	8	2.7	4	1.3
Labor Day	3	0.8	4	1.0	3	0.8
Halloween	0	0.0	0	0.0	0	0.0
Thanksgiving	2	0.4	6	1.2	2	0.4
Christmas	1	0.3	3	1.0	0	0.0
Total	17	0.6	32	1.1	24	0.9

# Crash Characteristics

Table 1.08 shows crashes involving two motor vehicles represented the majority of crashes (71.5%). Pedestrian-motor vehicle crashes represented 1.2% of all crashes, but accounted for 8.7% of fatal crashes resulting in nearly a 8-fold increased risk of a fatality. In addition when a vehicle ran off the roadway (to the right, to the left, and through the median), there was a 6-fold increased risk of a fatality.

Table 1.08 Types of Crashes, Utah 2002

Crash Type	Non-Injury Crashes		Injury Crashes		Fatal Crashes		Total Crashes	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Two Motor Vehicles	24,413	72.8%	13,671	69.9%	90	32.6%	38,174	71.5%
Ran Off Roadway - To the Right	2,065	6.2%	1,716	8.8%	53	19.2%	3,834	7.2%
Motor Vehicle and Fixed Object	1,675	5.0%	729	3.7%	13	4.7%	2,417	4.5%
Motor Vehicle and Wild Animal	2,046	6.1%	170	0.9%	0	0.0%	2,216	4.2%
Ran Off Roadway - To the Left	1,104	3.3%	1,007	5.2%	42	15.2%	2,153	4.0%
Other Non-Collision	707	2.1%	254	1.3%	5	1.8%	966	1.8%
Motor Vehicle and Other Object	664	2.0%	121	0.6%	3	1.1%	788	1.5%
Motor Vehicle and Pedestrian	28	0.1%	584	3.0%	24	8.7%	636	1.2%
Motor Vehicle and Bicycle	44	0.1%	585	3.0%	4	1.4%	633	1.2%
Ran Off Roadway Through Median	241	0.7%	265	1.4%	32	11.6%	538	1.0%
Overtaken in Roadway	164	0.5%	321	1.6%	7	2.5%	492	0.9%
Motor Vehicle and Domestic Animal	329	1.0%	89	0.5%	2	0.7%	420	0.8%
Motor Vehicle and Train	16	0.0%	9	0.0%	1	0.4%	26	0.0%
Motor Vehicle and Skates, Scooters, and Skateboards	0	0.0%	4	0.0%	0	0.0%	4	0.0%
Missing	46	0.1%	27	0.1%	0	0.0%	73	0.1%
Total	33,542	100.0%	19,552	100.0%	276	100.0%	53,370	100.0%

Table 1.09 shows the majority of injury crashes (74.9%) occurred in urban areas. However, approximately half of fatal crashes (61.6%) occurred in rural areas. In fact, rural crashes were 5 times more likely to result in a fatality than other crashes.

Table 1.09 Urban / Rural Location of Crashes, Utah 2002

Urban / Rural Location	Non-Injury Crashes		Injury Crashes		Fatal Crashes		Total Crashes	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Rural Area - Up to 5,000	8,938	26.6%	4,631	23.7%	170	61.6%	13,739	25.7%
Small Urban 5,000-49,999	1,865	5.6%	874	4.5%	9	3.3%	2,748	5.1%
Urban 50,000-199,999	1,006	3.0%	423	2.2%	4	1.4%	1,433	2.7%
Urban 200,000 or More	21,109	62.9%	13,337	68.2%	92	33.3%	34,538	64.7%
Missing	624	1.9%	287	1.5%	1	0.4%	912	1.7%
Total	33,542	100.0%	19,552	100.0%	276	100.0%	53,370	100.0%

Table 1.10 shows the leading collision types (excluding other) were a rear end (29.3%) and a broadside (18.9%). These were also the leading injury collision types. The leading fatal collision type was a single vehicle rollover (44.6%), followed by broadside (10.5%) and Pedestrian/Bicyclist Crash (10.1%). Head-on collisions were 14 times more likely and single vehicle rollovers were 12 times more likely to result in a fatality than other collisions.

Table 1.10 Collision Description of Crashes, Utah 2002

Collision Description	Non-Injury Crashes		Injury Crashes		Fatal Crashes		Total Crashes	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Other	13,145	39.2%	3,378	17.3%	27	9.8%	16,550	31.0%
Rear End	9,815	29.3%	6,036	30.9%	19	6.9%	15,870	29.7%
Broadside	6,343	18.9%	5,378	27.5%	29	10.5%	11,750	22.0%
Side Swipe	2,592	7.7%	868	4.4%	24	8.7%	3,484	6.5%
Single Vehicle Rollover	1,064	3.2%	2,255	11.5%	123	44.6%	3,442	6.4%
Pedestrian/Bicyclist Crash	72	0.2%	1,169	6.0%	28	10.1%	1,269	2.4%
Single Vehicle Fixed Object	344	1.0%	224	1.1%	3	1.1%	571	1.1%
Head-on	117	0.3%	219	1.1%	23	8.3%	359	0.7%
Single Vehicle Other	50	0.1%	25	0.1%	0	0.0%	75	0.1%
Total	33,542	100.0%	19,552	100.0%	276	100.0%	53,370	100.0%

Table 1.11 shows the majority of vehicles involved in Utah crashes were passenger cars (54.5%). While motorcycles represented less than 1% of vehicles involved in crashes, they represented 4.5% of vehicles in fatal crashes. Crashes involving a motorcycle were 6 times more likely to be fatal than crashes involving other vehicles. Crashes involving a large/semi truck were 4 times more likely to be fatal than crashes involving other vehicles.

Table 1.11 Type of Vehicles Involved in Crashes, Utah 2002

Vehicle Type	Non-Injury Crashes		Injury Crashes		Fatal Crashes		Total Crashes	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Passenger Car	32,879	53.4%	21,048	56.6%	155	36.7%	54,082	54.5%
Light Truck, Van or SUV	24,995	40.6%	13,912	37.4%	191	45.3%	39,098	39.4%
Large/ Semi Truck	2,277	3.7%	989	2.7%	49	11.6%	3,315	3.3%
Other	1,185	1.9%	452	1.2%	7	1.7%	1,644	1.7%
Motorcycle	90	0.1%	706	1.9%	19	4.5%	815	0.8%
School Bus	107	0.2%	33	0.1%	1	0.2%	141	0.1%
Missing	63	0.1%	37	0.1%	0	0.0%	100	0.1%
Total	61,596	100.0%	37,177	100.0%	422	100.0%	99,195	100.0%

# Crash Violations and Contributing Factors

Officers at the scene cited 33.6% of drivers involved in a crash for a traffic violation. Table 1.12 shows the leading violation for all crashes was “failure to yield right of way” (19.3%). The top violations in fatal crashes were “vehicular homicide” (18.4%) and “driving under the influence” (18.4%). Drivers cited for “driving under the influence” were 5 times more likely to be involved in a fatal crash than drivers cited for other violations.

Table 1.12 Violations for Crashes, Utah 2002

Violations	Non-Injury Crashes		Injury Crashes		Fatal Crashes		Total Crashes	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Failure to Yield Right of Way	3,443	17.9%	2,745	21.4%	3	7.9%	6,191	19.3%
Improper Lookout	3,630	18.9%	2,133	16.6%	0	0.0%	5,763	18.0%
Following Too Close	2,944	15.3%	1,725	13.4%	2	5.3%	4,671	14.6%
Other Non-Moving Violations	1,716	8.9%	1,155	9.0%	5	13.2%	2,876	9.0%
All Other Moving Violations	1,403	7.3%	898	7.0%	4	10.5%	2,305	7.2%
Speeding	1,083	5.6%	651	5.1%	5	13.2%	1,739	5.4%
Red Light	706	3.7%	938	7.3%	1	2.6%	1,645	5.1%
Negligent Collision	916	4.8%	566	4.4%	1	2.6%	1,483	4.6%
Driving Under the Influence	662	3.4%	776	6.0%	7	18.4%	1,445	4.5%
Improper Turn	724	3.8%	337	2.6%	2	5.3%	1,063	3.3%
Improper Lane Change	490	2.6%	167	1.3%	0	0.0%	657	2.0%
Stop Sign	240	1.2%	302	2.3%	1	2.6%	543	1.7%
Hit and Run	297	1.5%	102	0.8%	0	0.0%	399	1.2%
Improper Backing	353	1.8%	32	0.2%	0	0.0%	385	1.2%
Reckless Driving	160	0.8%	122	0.9%	0	0.0%	282	0.9%
Improper Passing	196	1.0%	71	0.6%	0	0.0%	267	0.8%
Wrong Side of Road	116	0.6%	89	0.7%	0	0.0%	205	0.6%
Improper Start and Stop	118	0.6%	43	0.3%	0	0.0%	161	0.5%
Vehicle Homicide	1	0.0%	0	0.0%	7	18.4%	8	0.0%
Wrong Way on One Way Street	4	0.0%	1	0.0%	0	0.0%	5	0.0%
Total	19,202	100.0%	12,853	100.0%	38	100.0%	32,093	100.0%



Factors contributing to crashes are listed in Table 1.13. Factors are coded for each vehicle involved in the crash by the police officer at the scene of the crash. The officer may record up to two different contributing factors. The leading contributing factor recorded for total crashes and injury crashes was "improper lookout" (24.3 % and 23%), while "speed too fast" (22.4%) was the leading contributing factor recorded for fatal crashes. If "driving under the influence," "had been drinking," and "under the influence of drugs" were combined it would be the third leading contributing factor for fatal crashes at 11.6%.

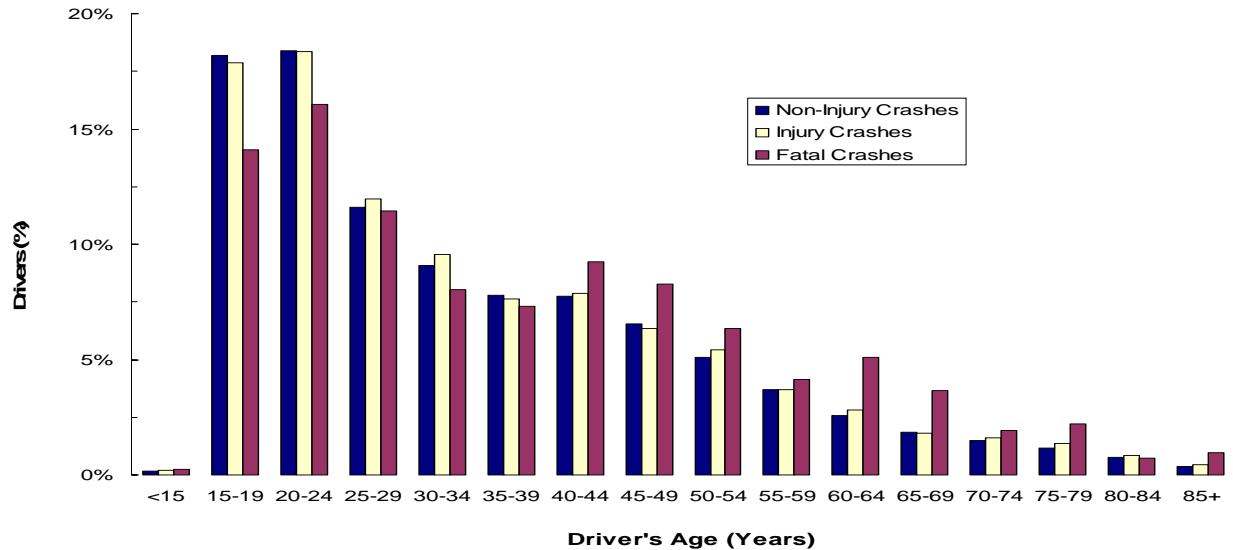
Table 1.13 Contributing Factors of Crashes, Utah 2002

Contributing Factor	Non-Injury Crashes		Injury Crashes		Fatal Crashes		Total Crashes	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Improper Lookout	10,495	25.3%	6,022	23.0%	39	9.3%	16,556	24.3%
Failed to Yield the Right of Way	5,660	13.7%	4,061	15.5%	24	5.7%	9,745	14.3%
Following Too Closely	5,302	12.8%	3,051	11.7%	7	1.7%	8,360	12.3%
Speed Too Fast	4,487	10.8%	2,850	10.9%	94	22.4%	7,431	10.9%
Other Improper Driving	3,452	8.3%	2,346	9.0%	57	13.6%	5,855	8.6%
Hit and Run	1,823	4.4%	655	2.5%	2	0.5%	2,480	3.6%
Improper Turn	1,568	3.8%	727	2.8%	5	1.2%	2,300	3.4%
Disregarded Traffic Signal	960	2.3%	1,185	4.5%	4	1.0%	2,149	3.2%
Improper Backing	721	1.7%	64	0.2%	0	0.0%	785	1.2%
Improper Overtaking	691	1.7%	276	1.1%	4	1.0%	971	1.4%
Driving Under the Influence	674	1.6%	797	3.0%	27	6.4%	1,498	2.2%
Non-Contact Vehicle Involved	581	1.4%	312	1.2%	9	2.1%	902	1.3%
Drove Left of Center	467	1.1%	441	1.7%	34	8.1%	942	1.4%
Asleep	449	1.1%	606	2.3%	31	7.4%	1,086	1.6%
Other Driving Distraction	414	1.0%	300	1.1%	1	0.2%	715	1.1%
Other Defective Condition	325	0.8%	136	0.5%	3	0.7%	464	0.7%
Object in Roadway	322	0.8%	133	0.5%	6	1.4%	461	0.7%
Passed Stop Sign	309	0.7%	399	1.5%	3	0.7%	711	1.0%
Cargo Loss or Shift	241	0.6%	74	0.3%	1	0.2%	316	0.5%
Tires Defective	240	0.6%	122	0.5%	3	0.7%	365	0.5%
Improper Parking	211	0.5%	78	0.3%	0	0.0%	289	0.4%
Fatigued	210	0.5%	287	1.1%	15	3.6%	512	0.8%
Had Been Drinking	185	0.4%	248	0.9%	14	3.3%	447	0.7%
Non-collision Fire	164	0.4%	9	0.0%	0	0.0%	173	0.3%
Brakes Defective	160	0.4%	129	0.5%	2	0.5%	291	0.4%
Towed Vehicle	112	0.3%	56	0.2%	2	0.5%	170	0.2%
Aggressive Driving	109	0.3%	68	0.3%	2	0.5%	179	0.3%
Failed to Signal	104	0.3%	37	0.1%	2	0.5%	143	0.2%
Separation of Units	97	0.2%	7	0.0%	1	0.2%	105	0.2%
Vehicle Rolling in Traffic Lane	92	0.2%	32	0.1%	0	0.0%	124	0.2%
Jackknife	87	0.2%	21	0.1%	2	0.5%	110	0.2%
Sick or ill	80	0.2%	155	0.6%	1	0.2%	236	0.3%
Driver Using Cell Phone	79	0.2%	72	0.3%	0	0.0%	151	0.2%
Under the Influence of Drugs	72	0.2%	103	0.4%	8	1.9%	183	0.3%
Windshield Not Clear	70	0.2%	42	0.2%	2	0.5%	114	0.2%
Down Hill Runaway	69	0.2%	24	0.1%	3	0.7%	96	0.1%
Wrong Side of Road	63	0.2%	74	0.3%	3	0.7%	140	0.2%
Explosion or Fire	62	0.1%	5	0.0%	0	0.0%	67	0.1%
Stolen	61	0.1%	42	0.2%	2	0.5%	105	0.2%
Other Lights or Reflecting/Defective	34	0.1%	23	0.1%	1	0.2%	58	0.1%
Headlights Glaring	33	0.1%	15	0.1%	0	0.0%	48	0.1%
Headlights Insufficient or Out	32	0.1%	22	0.1%	1	0.2%	55	0.1%
Steering Mechanism Defective	32	0.1%	14	0.1%	0	0.0%	46	0.1%
Eyesight Defective Uncorrected	19	0.0%	15	0.1%	0	0.0%	34	0.0%
Wrong Way on One Way Street	11	0.0%	12	0.0%	0	0.0%	23	0.0%
Collision Fire	9	0.0%	6	0.0%	5	1.2%	20	0.0%
Immersion	6	0.0%	6	0.0%	0	0.0%	12	0.0%
Total	41,444	100.0%	26,159	100.0%	420	100.0%	68,023	100.0%

# Drivers Involved in Crashes

Figure 1.08 shows the age of licensed drivers involved in crashes for 2002. The age distribution of drivers involved in total crashes and injury crashes were similar; drivers between the age of 15 to 24 years represented the highest percentage of drivers involved in these crashes. Drivers between the age of 20 to 24 years represented the largest percentage of drivers involved in fatal crashes. For information regarding crash rate per licensed driver, see Figure 1.09.

Figure 1.08 Age of Drivers Involved in Crashes, Utah 2002



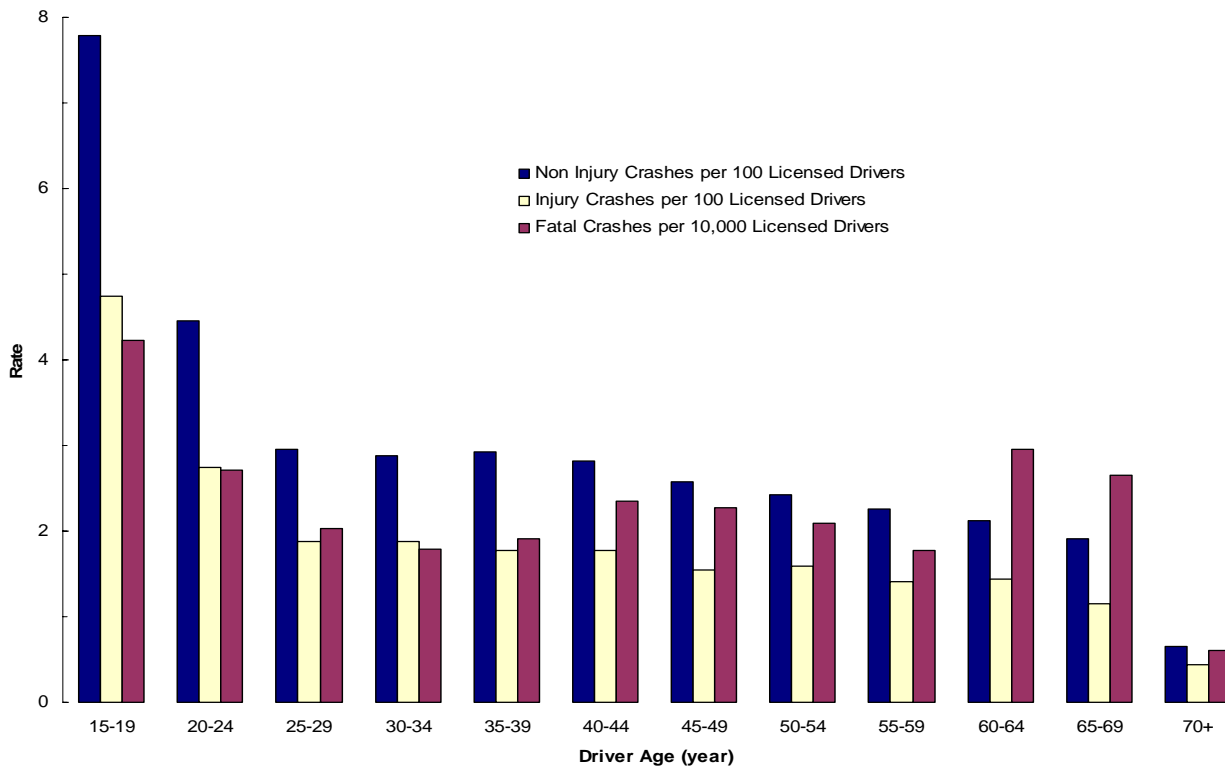
Note: The above graph is based on percentages for the different crash categories. To read the above graph, look at one category across the age groups. For example, look at only the white bars (i.e. drivers in injury crashes) from age group to age group. Do not compare the heights of the different crash categories for a specific age group.

Table 1.14 Age of Drivers Involved in Crashes, Utah 2002

Driver Age	Non-Injury Crashes		Injury Crashes		Fatal Crashes		Total Crashes	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
<15	86	0.1%	75	0.2%	1	0.2%	162	0.2%
15-19	10,690	18.2%	6,506	17.9%	58	14.1%	17,254	18.1%
20-24	10,818	18.4%	6,678	18.4%	66	16.1%	17,562	18.4%
25-29	6,822	11.6%	4,353	12.0%	47	11.4%	11,222	11.7%
30-34	5,330	9.1%	3,484	9.6%	33	8.0%	8,847	9.3%
35-39	4,584	7.8%	2,773	7.6%	30	7.3%	7,387	7.7%
40-44	4,555	7.8%	2,864	7.9%	38	9.2%	7,457	7.8%
45-49	3,850	6.6%	2,309	6.3%	34	8.3%	6,193	6.5%
50-54	3,004	5.1%	1,976	5.4%	26	6.3%	5,006	5.2%
55-59	2,167	3.7%	1,344	3.7%	17	4.1%	3,528	3.7%
60-64	1,504	2.6%	1,019	2.8%	21	5.1%	2,544	2.7%
65-69	1,080	1.8%	653	1.8%	15	3.6%	1,748	1.8%
70-74	863	1.5%	578	1.6%	8	1.9%	1,449	1.5%
75-79	678	1.2%	500	1.4%	9	2.2%	1,187	1.2%
80-84	447	0.8%	305	0.8%	3	0.7%	755	0.8%
85+	223	0.4%	156	0.4%	4	1.0%	383	0.4%
Unknown	2,065	3.5%	815	2.2%	1	0.2%	2,881	3.0%
Total	58,766	100.0%	36,388	100.0%	411	100.0%	95,565	100.0%

Similar trends in the age of drivers involved in crashes are illustrated in Figure 1.09 which shows the crash rate per licensed drivers. Drivers aged 15 to 19 years experienced the highest total crash, injury crash and fatal crash rates. Drivers aged 20 to 24 years had the second highest total crash and injury crash rate. Drivers 60 to 64 years had the second highest fatal crash rate.

Figure 1.09 Age of Driver by Crash Rate per Licensed Driver\*, Utah 2002



\*The number of licensed drivers was provided by the Utah Driver License Division.

Table 1.15 shows males represented 57.4% of all drivers involved in a crash, and 75.4% of drivers involved in fatal crashes. Females accounted for 40.3% of drivers involved in a crash, but they represented a slightly higher percentage of drivers in injury crashes at 43.4%.

Table 1.15 Gender of Drivers Involved in Crashes, Utah 2002

Driver Gender	Non-Injury Crashes		Injury Crashes		Fatal Crashes		Total Crashes	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Female	22,623	38.5%	15,801	43.4%	101	24.6%	38,525	40.3%
Male	34,528	58.8%	20,043	55.1%	310	75.4%	54,881	57.4%
Unknown	1,615	2.7%	544	1.5%	0	0.0%	2,159	2.3%
Total	58,766	100.0%	36,388	100.0%	411	100.0%	95,565	100.0%

# Out of State Drivers Involved in Utah Crashes

Table 1.16 shows the state of licensure for drivers involved in Utah crashes. While out-of-state licensed drivers accounted for 9.1% of drivers involved in crashes, they represented 24.1% of drivers involved in fatal crashes. This may be due in part to fatigued driving on out-of-state trips.

There were several counties that had a disproportional amount of out-of-state drivers (Table 1.17). Most notably, San Juan (47.7%), Grand (47.5%), Kane (45.9%), and Garfield (44.0%) had a high proportion of out-of-state licensed drivers involved in crashes. These drivers may place an extra burden on the residents and medical services in these counties.

Table 1.17 State of Licensure for Drivers by County, Utah 2002

County	Total Drivers*	Out of State Drivers	
		Number	Percent
Beaver	402	141	35.1%
Box Elder	1,320	224	17.0%
Cache	3,952	437	11.1%
Carbon	658	66	10.0%
Daggett	45	15	33.3%
Davis	8,177	506	6.2%
Duchesne	367	32	8.7%
Emery	424	162	38.2%
Garfield	209	92	44.0%
Grand	398	189	47.5%
Iron	1,382	307	22.2%
Juab	479	106	22.1%
Kane	305	140	45.9%
Millard	575	191	33.2%
Morgan	209	26	12.4%
Piute	55	13	23.6%
Rich	88	19	21.6%
Salt Lake	41,108	2,277	5.5%
San Juan	384	183	47.7%
Sanpete	520	24	4.6%
Sevier	788	268	34.0%
Summit	1,291	309	23.9%
Tooele	1,284	159	12.4%
Uintah	753	66	8.8%
Utah	13,542	1,493	11.0%
Wasatch	784	99	12.6%
Washington	3,271	478	14.6%
Wayne	95	27	28.4%
Weber	9,411	636	6.8%
Statewide	95,565	8,687	9.1%

Table 1.16 State of Licensure for Drivers Involved in Crashes, Utah 2002

Drivers License State	Non-Injury Crashes		Injury Crashes		Fatal Crashes		Total Crashes	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Out of State	5,345	9.1%	3,243	8.9%	99	24.1%	8,687	9.1%
Utah	51,176	87.1%	32,138	88.3%	304	74.0%	83,618	87.5%
Missing	2,245	3.8%	1,007	2.8%	8	1.9%	3,260	3.4%
Total	58,766	100.0%	36,388	100.0%	411	100.0%	95,565	100.0%